

**WE CLAIM**

1           1.     A pressure measuring device, said device comprising:  
2                     a housing;  
3                     at least one pressure responsive element disposed within said housing;  
4                     a movement mechanism having an input end in proximity to a moveable surface of  
5     said at least one pressure responsive element;  
6                     an indicator connected to an output end of said movement mechanism which  
7     indicates changes in pressure;  
8                     and shock absorbing means for creating a noncontinuous path for preventing  
9     impinging shock and input loads from reaching the components disposed within said housing.

1           2.     A pressure measuring device as recited in Claim 1, wherein said shock absorbing  
2     means includes a bumper mounted onto the exterior of said housing, said bumper having a  
3     periphery including at least one extending portion extending beyond said periphery, said  
4     extending portion defining at least one gap region for absorbing a shock or impact load applied  
5     thereto.

1           3.     A pressure measuring device as recited in Claim 2, wherein at least one extending  
2     portion of said bumper extends axially above a viewing window attached to an upper portion of  
3     said housing.

1           4.     A pressure measuring device as recited in Claim 2, wherein at least one extending  
2     portion of said bumper extends radially outward from the periphery of said bumper.

1           5.     A pressure measuring device as recited in Claim 1, wherein said housing includes  
2     an upper portion and a lower portion, said lower portion having means for directly engaging an  
3     inflatable blood pressure sleeve.

1           6.     A pressure measuring device as recited in Claim 5, wherein said shock absorbing  
2 means includes at least one circumferential channel formed in the lower portion of said housing.

1           7.     A pressure measuring device as recited in Claim 6, wherein said circumferential  
2 channel is disposed in a bottom surface of said lower housing portion.

1           8.     A pressure measuring device as recited in Claim 6, wherein said circumferential  
2 channel is disposed adjacent the bottom surface of said lower housing portion.

1           9.     A pressure measuring device as recited in Claim 5, wherein said engaging means  
2 of said lower housing portion includes an engagement end sized for direct coupling to an  
3 inflatable blood pressure sleeve without requiring hoses.

1           10.    A pressure measuring device as recited in Claim 9, wherein said engagement end is  
2 a substantially cylindrical section having an opening to permit fluid communication between the  
3 interior of an inflatable blood pressure sleeve and the interior of said housing.

1           11.    A pressure measuring device comprising: a housing having an upper portion and a  
2 lower portion, said lower portion including at least one engagement portion for permitting direct  
3 mounting to an inflatable blood pressure sleeve.

1           12.    A pressure measuring device as recited in Claim 11, wherein said engagement  
2 portion includes at least one circumferential channel adjacent a depending end  
3 thereof for reducing the transmission of shock or impact loads to a movement  
4 mechanism retained within said housing.

1           13.    A pressure measuring device as recited in Claim 12, wherein at least one  
2 circumferential channel is disposed on a bottom surface of said engagement  
3 portion.

1           14.     A pressure measuring device as recited in Claim 12, wherein at least one  
2 circumferential channel is disposed along an axial portion of said engagement  
3 portion.

1           15.     A pressure measuring device as recited in Claim 11, including said inflatable blood  
2 pressure sleeve, said sleeve having a receiving portion for directly receiving said  
3 engagement portion, said receiving portion having an opening which permits fluid  
4 communication between the interior of the sleeve and the interior of the housing.

1           16.     A pressure measuring device as recited in Claim 11, including a movement  
2 mechanism disposed within said housing and shock absorbing means for preventing the  
3 transmission of certain shock and impact loads to the movement mechanism, said shock absorbing  
4 means including means for creating a discontinuous path for said shock and impact loads.

1           17.     A pressure measuring device as recited in Claim 16, wherein said shock absorbing  
2 means includes a peripheral bumper mounted onto the exterior of said housing, said bumper  
3 having a periphery including at least one extending portion extending beyond said periphery, said  
4 extending portion including at least one gap region defining a buffer for absorbing a shock or  
5 impact load applied thereto.

1           18.     A pressure measuring device as recited in Claim 17, wherein said at least one  
2 extending portion of said peripheral bumper extends axially above a viewing window attached to  
3 said upper portion of said housing.

1           19.     A pressure measuring device as recited in Claim 17, wherein at least one extending  
2 portion of said peripheral bumper extends radially outward from the periphery of said bumper.

1           20.     A pressure measuring device as recited in Claim 16, wherein said shock absorbing  
2 means includes at least one circumferential channel in said lower portion.

1           21.     A pressure measuring device as recited in Claim 20, wherein said at least one  
2 circumferential channel is disposed in said engagement portion.

1           22.     A pressure measuring device as recited in Claim 21, wherein said circumferential  
2 channel is cut into a bottom surface of said engagement portion.

1           23.     A pressure measuring device as recited in Claim 21, wherein said circumferential  
2 channel is cut adjacent to a depending end of said engagement portion.